

The Office of the National Coordinator for Health Information Technology



The USCDI is a standardized set of health data classes and constituent data elements for nationwide, interoperable health information exchange.

A USCDI "Data Class" is an aggregation of various Data Elements by a common theme or use case.

A USCDI "Data Element" is the most granular level at which a piece of data is represented in the USCDI for exchange.

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### USCDI v1 Summary of Data Classes and Data Elements

#### **Assessment and Plan** of Treatment

#### Laboratory

- Tests
- Values/Results

#### **Provenance**

- Author
- Author Time Stamp
- Author Organization

#### **Care Team Members**

- Medications Medications
- Medication Allergies

### **Clinical Notes**

- Consultation Note
- Discharge Summary Note
- History & Physical
- Imaging Narrative
- Laboratory Report Narrative
- Pathology Report Narrative
- Procedure Note
- **Progress Note**

### **Patient Demographics**

- First Name
- Last Name
- Previous Name
- Middle Name (including middle initial)
- Suffix
- Birth Sex
- Date of Birth
- Race
- Ethnicity
- Preferred Language
- Address
- Phone Number

#### **Smoking Status**

**Unique Device** Identifier(s) for a Patient's Implantable Device(s)

#### Goals

Patient Goals

#### **Problems**

# **Vital Signs**

- Diastolic blood pressure
- Systolic blood pressure
- Body height
- Body weight
- Heart Rate
- Body temperature
- Pulse oximetry
- Inhaled oxygen concentration
- BMI percentile per age and sex for youth 2-20
- Weights for age per length and sex
- Occipital-frontal circumference for children >3 years old

#### **Health Concerns**

#### **Immunizations**

#### **Procedures**



# Assessment and Plan of Treatment

Represents a health professional's conclusions and working assumptions that will guide treatment of the patient.

DATA ELEMENT	APPLICABLE STANDARD(S)
Assessment and Plan of Treatment	<ul> <li>Logical Observation Identifiers Names and Codes (LOINC®)</li> <li>Database version 2.63</li> </ul>
	<ul> <li>SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2018 Release</li> </ul>

#### **DATA CLASS**

# Care Team Member(s)

The specific person(s) who participate or are expected to participate in the care team.

DATA ELEMENT	APPLICABLE STANDARD(S)
Care Team Member(s)	N/A

### Clinical Notes

Composed of both structured (i.e. obtained via pick-list and/or check the box) and unstructured (free text) data. A clinical note may include the history, Review of Systems (ROS), physical data, assessment, diagnosis, plan of care and evaluation of plan, patient teaching and other relevant data points.

DATA ELEMENT	APPLICABLE STANDARD(S)
Consultation Note	
Is generated as part of a request from a clinician for an opinion or advice from another clinician.	
Discharge Summary Note	
A synopsis of a patient's admission and course in a hospital or post-acute care setting.	
History & Physical	
Documents the current and past conditions of the patient.	
Imaging Narrative	
Contains a consulting specialist's interpretation of image data.	
Laboratory Report Narrative	Logical Observation Identifiers
Contains a consulting specialist's interpretation of the laboratory report.	Names and Codes (LOINC®) Database version 2.63
Pathology Report Narrative	
Contains a consulting specialist's interpretation of the pathology report.	
Procedure Note	
Encompasses many types of non-operative procedures including interventional cardiology, gastrointestinal endoscopy, osteopathic manipulation, and many other specialty fields.	
Progress Note	
Represents a patient's interval status during a hospitalization, outpatient visit, treatment with a LTPAC provider, or other healthcare encounter.	

#### Goals

An expressed desired health state to be achieved by a subject of care (or family/group) over a period of time or at a specific point of time.

DATA ELEMENT	APPLICABLE STANDARD(S)
Patient's Goals	<ul> <li>Logical Observation Identifiers Names and Codes (LOINC®)</li> <li>Database version 2.63</li> </ul>
	<ul> <li>SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2018 Release</li> </ul>

#### DATA CLASS

#### **Health Concerns**

Health related matter that is of interest, importance, or worry to someone who may be the patient's family or patient's health care provider.

DATA ELEMENT	APPLICABLE STANDARD(S)
Health Concerns	<ul> <li>Logical Observation Identifiers Names and Codes (LOINC®)</li> <li>Database version 2.63</li> </ul>
	<ul> <li>SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2018 Release</li> </ul>



# **Immunizations**

Record of an administration of a vaccination or a record of a vaccination as reported by a patient, a clinician, or another party.

DATA ELEMENT	APPLICABLE STANDARD(S)
Immunizations	<ul> <li>CDC IIS: Current HL7 Standard Code Set, CVX Vaccines         Administered, updates through October 27, 2017</li> <li>CDC National Drug Code (NDC) Directory – Vaccine NDC Linker,         updates through April 6, 2018</li> </ul>

### DATA CLASS

# Laboratory

DATA ELEMENT	APPLICABLE STANDARD(S)
Tests  Examinations of specimens derived from humans for the purpose of providing information for the diagnosis, prevention, treatment of disease, or impairment of, or assessment of health.	<ul> <li>Logical Observation Identifiers Names and Codes (LOINC®)         Database version 2.63</li> <li>SNOMED International, Systematized Nomenclature of         Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March         2018 Release</li> <li>The Unified Code of Units for Measure, Revision 1.9</li> </ul>
Values/Results  Outcome of the examination of a tested specimen.	<ul> <li>Logical Observation Identifiers Names and Codes (LOINC®)         Database version 2.63     </li> <li>SNOMED International, Systematized Nomenclature of             Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March             2018 Release,</li> <li>The Unified Code of Units for Measure, Revision 1.9</li> </ul>



# Medication

DATA ELEMENT	APPLICABLE STANDARD(S)
Medications	<ul> <li>RxNorm, June 4, 2018 Full Release Update</li> <li>The Unified Code of Units for Measure, Revision 1.9</li> </ul>
Medications Allergies	<ul> <li>RxNorm, June 4, 2018 Full Release Update</li> <li>The Unified Code of Units for Measure, Revision 1.9</li> </ul>

### DATA CLASS

# Patient Demographics

DATA ELEMENT	APPLICABLE STANDARD(S)
First Name	
Last Name	
Previous Name	
Middle Name (including middle initial)	
Suffix	
Birth Sex	Birth sex must be coded in accordance with HL7 Version 3 (V3) Standard, Value Sets for AdministrativeGender and NullFlavor ( <a href="https://www.healthit.gov/sites/default/files/170299">https://www.healthit.gov/sites/default/files/170299</a> <a href="mailto:files/170299">f 29 hl7 v3 agender and nullflavor.pdf</a> ) attributed as follows:  1. Male. M
	<ol> <li>Female. F</li> <li>Unknown. nullFlavor UNK</li> </ol>
Date of Birth	



DATA ELEMENT	APPLICABLE STANDARD(S)
Race	<ul> <li>The Office of Management and Budget Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, as revised, October 30, 1997 (https://obamawhitehouse.archives.gov/omb/fedreg_1997standards)</li> <li>CDC Race and Ethnicity Code Set Version 1.0 (March 2000) (https://www.cdc.gov/phin/resources/vocabulary/index.html)</li> </ul>
Ethnicity	<ul> <li>The Office of Management and Budget Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, as revised, October 30, 1997 (<a href="https://obamawhitehouse.archives.gov/omb/fedreg">https://obamawhitehouse.archives.gov/omb/fedreg</a> 1997standards)</li> <li>CDC Race and Ethnicity Code Set Version 1.0 (March 2000) (<a href="https://www.cdc.gov/phin/resources/vocabulary/index.html">https://www.cdc.gov/phin/resources/vocabulary/index.html</a>)</li> </ul>
Preferred Language	Request for Comment (RFC) 5646, "Tags for Identifying Languages", September 2009 ( <a href="https://tools.ietf.org/html/bcp47">https://tools.ietf.org/html/bcp47</a>
Address	
Phone Number	



# **Problems**

Information about a condition, diagnosis, or other event, situation, issue, or clinical concept that is documented.

DATA ELEMENT	APPLICABLE STANDARD(S)
Problems	SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2018 Release

#### **DATA CLASS**

### **Procedures**

An activity that is performed with or on a patient as part of the provision of care.

DATA ELEMENT	APPLICABLE STANDARD(S)
Procedures	The code set specified in 45 CFR 162.1002(a)(5):
	<ul> <li>Health Care Financing Administration Common Procedure Coding System (HCPCS), as maintained and distributed by HHS.</li> </ul>
	<ul> <li>Current Procedural Terminology, Fourth Edition (CPT-4), as maintained and distributed by the American Medical Association, for physician services and other health care services.</li> </ul>
	<ul> <li>SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2018 Release</li> </ul>
	Optional:
	o International Classification of Diseases ICD-10-PCS 2018
	<ul> <li>Optional for technology primarily developed to record dental procedures:</li> </ul>
	<ul> <li>The code set specified in 45 CFR 162.1002(a)(4)</li> <li>SNODENT, as maintained and distributed by the American Dental Association, for dental services.</li> </ul>



#### Provenance

The metadata, or extra information about data, that can help answer questions such as when and who created the data.

DATA ELEMENT	APPLICABLE STANDARD(S)
Author	N/A
Author Time Stamp	N/A
Author Organization	N/A

#### **DATA CLASS**

# **Smoking Status**

Classification of a patient's smoking behavior.

DATA ELEMENT	APPLICABLE STANDARD(S)
Smoking Status	SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2018 Release

#### **DATA CLASS**

# Unique Device Identifier(s) for a Patient's Implantable Device(s)

A unique numeric or alphanumeric code that consists of a device identifier (DI) and a production identifier (PI).

DATA ELEMENT	APPLICABLE STANDARD(S)
Unique Device Identifier(s) for a patient's implantable device(s)	UDI identifier as described by applicable FDA regulation. (found at <a href="https://www.fda.gov/MedicalDevices/Device">https://www.fda.gov/MedicalDevices/Device</a> RegulationandGuidance/UniqueDeviceIdentification/)





# Vital Signs

Physiologic measurements of a patient that indicate the status of the body's life sustaining functions.

DATA ELEMENT	APPLICABLE STANDARD(S)
Diastolic blood pressure  Systolic blood pressure  Body height  Body weight  Heart Rate  Respiratory rate  Body temperature  Pulse oximetry  Inhaled oxygen concentration  BMI percentile per age and sex for youth 2-20  Weight for age per length and sex  Occipital-frontal circumference for children >3 years old	<ul> <li>Logical Observation Identifiers Names and Codes (LOINC®)     Database version 2.63</li> <li>The Unified Code of Units for Measure, Revision 1.9</li> </ul>